# **Monthly Progress Report**

REC'D 4/3/91

I.D. M.D.: R. DO0119/3

Submitted to:

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Submitted by:

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Pursuant to:

RCRA I-88-1088

**Facility Site:** 

Cranston, RI

Period Covered: March 1991 (23 February 1991 – 22 March 1991)\*

Date Submitted: 10 April 1991

#### SUMMARY 1.0

This is the ninth monthly progress report. Twelve significant events occurred this month. These events are summarized in this section and discussed in detail in later sections of this report.

Monitoring Well Installation (Task 5.1). USEPA visited the site on 3/21/91 and verified the locations of wells and piezometers.

Background Sampling (Task 5.2). Round 2 of the background sampling was completed.

Round 1 Analyses (Task 5.7). Chemical analyses of soil, sediment, and water samples from Round 1 were completed; reduction and interpretation of other field data continued.

Round 1 Data Validation (Task 5.8). Data validation continued for Round 1 samples.

Round 2 Off-Site Soil Sampling (Task 5.9). A meeting with the USEPA, WCC, and CIBA-GEIGY was held at the site on 3/6/91; the off-site sampling locations identified in the Order were visited and approved by USEPA. Round 2 off-site soil sampling was completed.

Round 2 On-Site Soil Sampling (Task 5.11). Based on evaluation of the Round 1 data, Round 2 on-site soil sampling locations were selected. Round 2 on-site soil sampling was completed.

Round 2 Analyses (Task 5.13). Analyses of Round 2 soil samples began.

Interim Report (Task 7). A Woodward-Clyde staff meeting was held on 3/1/91 with the Interim Report authors and editors to discuss the outline, style guidelines, report development schedule, and data management issues for the report; the outline, style guidelines, and schedule were revised. Drafting selected sections of the Interim Report continued.

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<sup>\*</sup>As agreed, the reporting period will be monthly through the fourth Friday of the month.

Data Management (Task 10). Development of the project data base (i.e., making it operational) was completed. Loading Round 1 analytical data continued.

Water Level Monitoring. Monthly groundwater level monitoring continued.

RFI Proposal. USEPA approved the proposed Round 2 river sampling strategy on 3/21/91.

Phase IA Report. USEPA review of the Phase IA Report continued.

<u>Change in Plan</u>: In a teleconference call on 2/25/91, USEPA requested additional revisions to the Phase IA Report; the changes will be specified in a letter (forthcoming) from USEPA. [Section 8.0 discusses changes in the Work Plan.]

### 2.0 TASKS AND ACTIVITIES COMPLETED

The sampling and other activities (subtasks) that were completed are reported here.

### 2.1 Sampling Activities Completed

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The following sampling activities were completed:

			No. of	Date(s) Sent	
Sampling Activity	Location(s)	Date(s) Sampled	<u>Samples</u>	for Analysis	Analysis
Soil Sampling (On-Site)	SWMU-2	3/14/91	2	3/14/91	C
	SWMU-2	3/19/91	1	3/19/91	С
	SWMÜ-3	3/18/91	3	3/18/91	С
	SWMU-6	3/12/91	3	3/12/91	С
	SWMU-7	3/18/91	2	3/18/91	C
	SWMU-8	3/14/91	2	3/14/91	C
	SWMU-9	3/12/91	3	3/12/91	C
	SWMU-10	3/13/91	3	3/13/91	C
	SWMU-11	3/19/91	2	3/19/91	С
	SWMU-12	3/13/91	4	3/13/91	C
	AOC-13	3/14/91	6	3/14/91	C
	AOC-13	3/19/91	4	3/19/91	С
	AAOI-15	3/14/91	2	3/14/91	С
	AAOI-16	3/13/91	2	3/13/91	С
	GBW567	3/12/91	1	3/12/91	P
	FWQ131	3/12/91	1	3/12/91	Р
Soil Sampling (Off-Site)	(off-site locations)	3/20/91	14	3/20/91	С
	(background locations)	3/21/91	4	3/21/91	Č

#### NOTES:

C = sample was submitted for chemical analyses

The sampling results will be reported after the data have been validated and loaded into the project data base.

#### 2.2 Other Activities Completed

Other activities (subtasks) were completed within several tasks.

Monitoring Well Installation (Task 5.1). USEPA visited the site on 3/21/91 and verified the locations of wells and piezometers.

P = Performance Evaluation (dioxin) samples

Background Sampling (Task 5.2). Round 2 of the background sampling was completed.

Round 1 Analyses (Task 5.7). Chemical analyses of soil, sediment, and water samples from Round 1 were completed.

Round 2 Off-Site Soil Sampling (Task 5.9). A meeting with the USEPA, WCC, and CIBA-GEIGY was held at the site on 3/6/91; the off-site sampling locations identified in the Order were visited and approved by USEPA. Round 2 off-site soil sampling was completed.

Round 2 On-Site Soil Sampling (Task 5.11). Based on evaluation of the Round 1 data, Round 2 on-site soil sampling locations were selected. Round 2 on-site soil sampling was completed.

Interim Report (Task 7). A Woodward-Clyde staff meeting was held on 3/1/91 with the Interim Report authors and editors to discuss the outline, style guidelines, report development schedule, and data management issues for the report; the outline, style guidelines, and schedule were revised.

Data Management (Task 10). Development of the project data base (i.e., making it operational) was completed.

RFI Proposal. USEPA approved the proposed Round 2 river sampling strategy on 3/21/91.

## 3.0 JEOPARDY TASKS (scheduled tasks not completed)

No tasks were in jeopardy as of 22 March 1991.

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# 4.0 OTHER TASKS UNDERWAY (and on schedule)

The tasks that were underway (and on schedule as of 22 March 1991) are reported here.

Round 1 Analyses (Task 5.7). Reduction and interpretation of the remaining field data continued.

Round 1 Data Validation (Task 5.8). Data validation continued for Round 1 samples.

Round 2 Analyses (Task 5.13). Analyses of Round 2 soil samples began.

Interim Report (Task 7). Drafting selected sections of the Interim Report continued.

Data Management (Task 10). Loading Round 1 analytical data continued.

Water Level Monitoring. Monthly groundwater level monitoring continued.

Phase IA Report. USEPA review of the Phase IA Report continued.

### 5.0 DATA OBTAINED

The sampling results and other data obtained are reported here.

### 5.1 Sampling Results

Analytical laboratory data from Round 1 samples have been received and are being validated. The Round 1 sampling results will be reported after the data have been validated and loaded into the project data base.

#### 5.2 Other Data Obtained

Groundwater level data have been obtained but have not yet been peer reviewed.

### 6.0 PROBLEM AREAS

The resolved, new, and potential (i.e., anticipated or possible) problem areas are reported here.

#### 6.1 Resolved Problem Areas

Three potential problem areas were resolved during this reporting period.

Development of the Project Data Base Delayed

Review of the Problem. The Round 1 analytical laboratory data were received in a format incompatible with that required by the data base software, so the data base software had to be modified. As a result, loading and evaluating the laboratory data were delayed. Since Round 2 activities depend on evaluating the Round 1 data, this delay in loading the data base and evaluating the Round 1 data impacted the start dates in the Round 2 task schedule.

**Resolution**. The software modifications necessary to resolve the format incompatibilities are complete; the modified data base software is operational. Preliminary reports of unvalidated sample results have been generated.

#### Starting Round 2 River Sampling Delayed

Review of the Problem. Because Round 2 sediment and surface water sampling of the Pawtuxet River depended on USEPA approval of the proposed river sampling strategy, starting Round 2 river sampling had been postponed.

**Resolution.** USEPA approved the proposed Round 2 river sampling strategy on 3/21/91. Round 2 river sampling will begin on 3/25/91.

### Starting Round 2 Soil Sampling Delayed

Review of the Problem. The Round 2 sampling strategy depends in part on the results from Round 1. The Round 2 sampling strategy could not be developed fully until the Round 1 data had been evaluated. The Round 1 data had been loaded into the project data base but had not been evaluated. Starting Round 2 on-site soil sampling had been postponed from 3/4/91 to 3/11/91; starting Round 2 off-site soil sampling had been postponed from 3/18/91 to 3/25/91.

**Resolution.** The preliminary evaluation of the Round 1 data reports permitted specifying the locations for Round 2 on-site samples. Round 2 soil sampling was completed on schedule both on-site and off-site.

#### 6.2 New Problem Areas

Two new problem areas were identified during this reporting period.

Geotechnical Analyses of Round 1 Sediment (and Possibly Unsaturated Soil) Samples Delayed

Review of the Problem. Both the Round 1 sediment and unsaturated soil samples (collected above the water table) could not be submitted for geotechnical analysis until 1) the analytical results from the Round 1 samples had been evaluated, 2) the nature of the contamination had been determined, and 3) the appropriate laboratory procedures for handling those contaminants had been implemented. The preliminary Round 1 analytical results indicated that conducting the geotechnical analyses of the sediment samples (and possibly some soil samples) at the WCC geotechnical laboratory in Clifton, NJ (where the geotechnical analyses were to have been performed) is incompatible with the current conditions of the lease at that facility. Thus, the sediment samples must be submitted to another laboratory for geotechnical analyses. No suitable alternate laboratory has been identified yet, so geotechnical analyses of the Round 1 sediment samples (and possibly of the Round 1 unsaturated soil samples as well) have been delayed.

Plans for Resolution. We are investigating other laboratories at which the necessary geotechnical analyses of the contaminated sediment samples could be conducted.

Round 1 Dioxin Performance Evaluation Sample Results Failed to Meet Specifications

Review of the Problem. The analytical results of the Round 1 PE samples (spiked by USEPA and supplied to CIBA-GEIGY) were outside the acceptable range of accuracy permitted by USEPA Region I. Failure to meet the specified accuracy range for the PE samples suggests that the concentrations of these substances detected in the Round 1 samples may have been overestimated. Reanalysis may be necessary.

Plans for Resolution. All laboratory and validation data are being reviewed. This issue is being clarified and possible corrective actions are being explored with the USEPA, CIBA-GEIGY, and the subcontractor analytical laboratory. The USEPA has recommended reanalysis.

### 6.3 Potential Problem Area

One potential problem area was identified during this reporting period.

Chemical Analyses of Round 2 Samples Could Be Delayed

Review of the Problem. The analytical laboratory has announced that the turnaround time for the chemical analyses of the Round 2 samples could be as long as 8 weeks. The agreed-upon turnaround time for chemical analyses of Round 2 samples was 5 weeks. If the analytical laboratory does not return the results of the chemical analyses of Round 2 samples for 8 weeks, subsequent dependent tasks could be delayed.

Plans for Resolution. The expected turnaround time for chemical analyses of the Round 2 samples will be clarified and verified with the laboratory. If the expected turnaround time actually is 8 weeks, and if that expected turnaround time cannot be shortened, then the impact on the overall project schedule will be examined.

# 7.0 PROJECTED SCHEDULE OF TASKS (next two months)

The projected schedule (based on Figure 5-2 in Volume 1, Chapter 2 of the RCRA Facility Investigation Proposal) is provided here. It covers the tasks to be performed in the next two months (April and May 1991), along with other comments or considerations.

Target Date	Task#	Task	Comments/Considerations
3/25/91	5.3	Round 2 Sediment Sampling	
4/24/91	5.7	Round 1 Analyses	completed
5/1/91	5.9	Round 2 Off-Site Soil Sampling	completed
5/8/91	5.10	Round 2 Surface Water Sampling	•
5/10/91	8	April Progress Report	
5/15/91	5.11	Round 2 On-Site Soil Sampling	completed
5/15/91	5.8	Round 1 Data Validation	completed
5/29/91	5.12	Round 2 Groundwater Sampling	·
ongoing	9	Project Management	
ongoing	10	Data Management	
ongoing	11	Project Administration	
ongoing	12	Quality Assurance	
ongoing	13	Health & Safety Assurance	

### 8.0 CHANGES IN WORK PLAN

Changes to Phase IB of the Work Plan based on the findings from Phase IA were recommended in the Phase IA Report (submitted 10/24/90). One additional change to Phase IB of the Work Plan was made during this reporting period and is described here.

Phase IA Report. In a teleconference call on 2/25/91, USEPA requested additional revisions to the Phase IA Report; the changes will be specified in a letter (forthcoming) from USEPA.

#### 9.0 OTHER COMMENTS

The plans going forward into April and May include:

- continuing the Phase IB field investigation,
- reducing and validating the data collected, and
- continuing to develop the Interim Report.